CAPE COD RAIL TRAIL EXTENSION YARMOUTH/BARNSTABLE

Barnstable/Yarmouth CCRT Extension Project Location

PROJECT GOALS

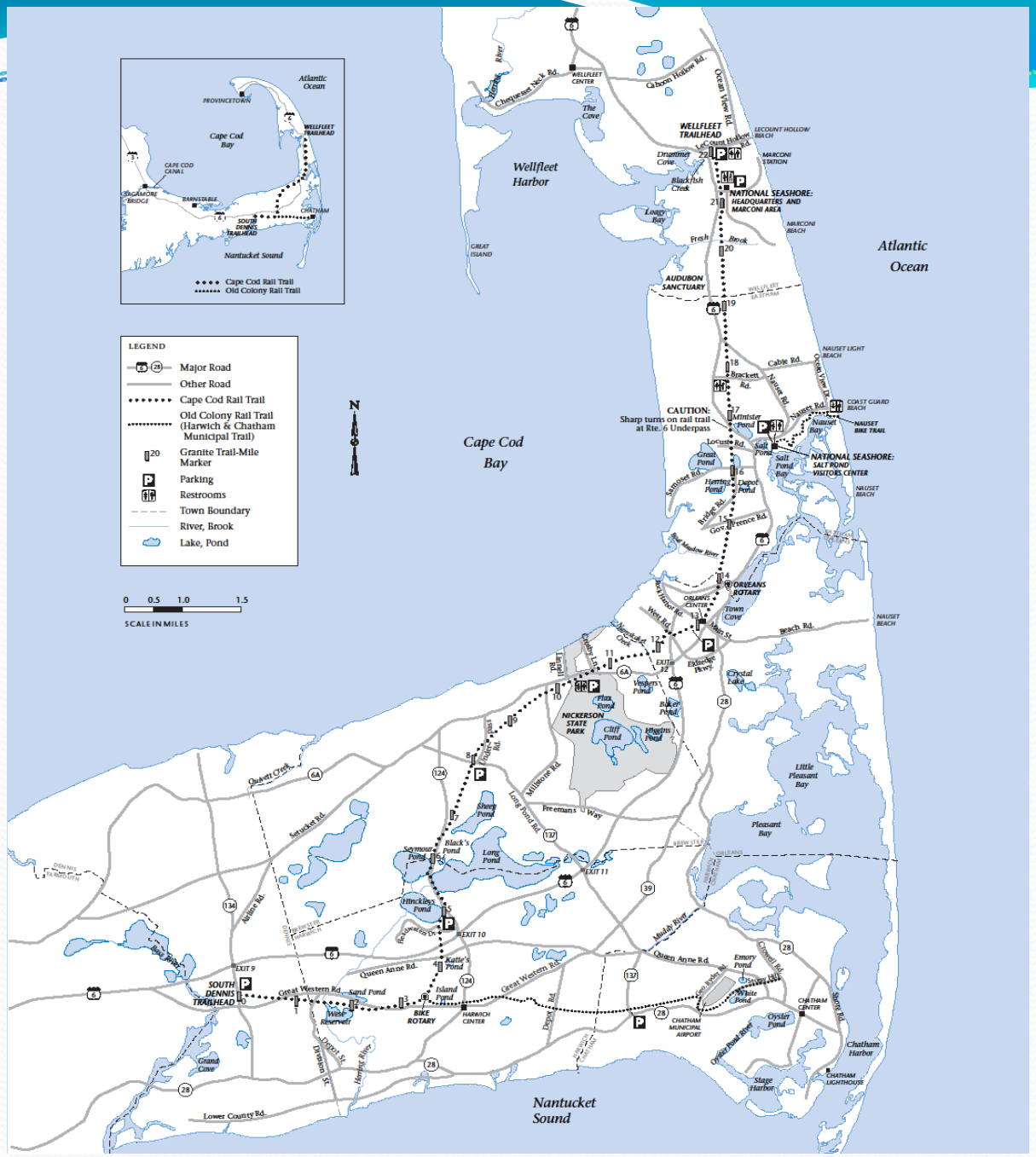
- Shared Use for all pedestrian activities
- Achieve desired design standards
- Satisfy safety and accessibility standards for all users.
- Provide Connectivity to desired destinations

Project Task Force

- Town of Barnstable
  - Lindsey B. Counsell (Bike Path Chairman)
  - Alisha Parker (Growth Management Department)
  - Jo Anne Miller Buntich (Growth Management Department)
  - Ruth Weil and David Houghton (Town Attorneys)
- Town of Yarmouth
  - George Allaire P.E. (DPW)
- MassDOT
  - Pamela Haznar P.E.(District 5 Projects Development)
- Cape Cod Commission
  - Martha Hevenor
  - Glenn Cannon
- Commonwealth of Mass State Legislature
  - Senator Daniel Wolf
- VHB
  - Joe Magni P.E.

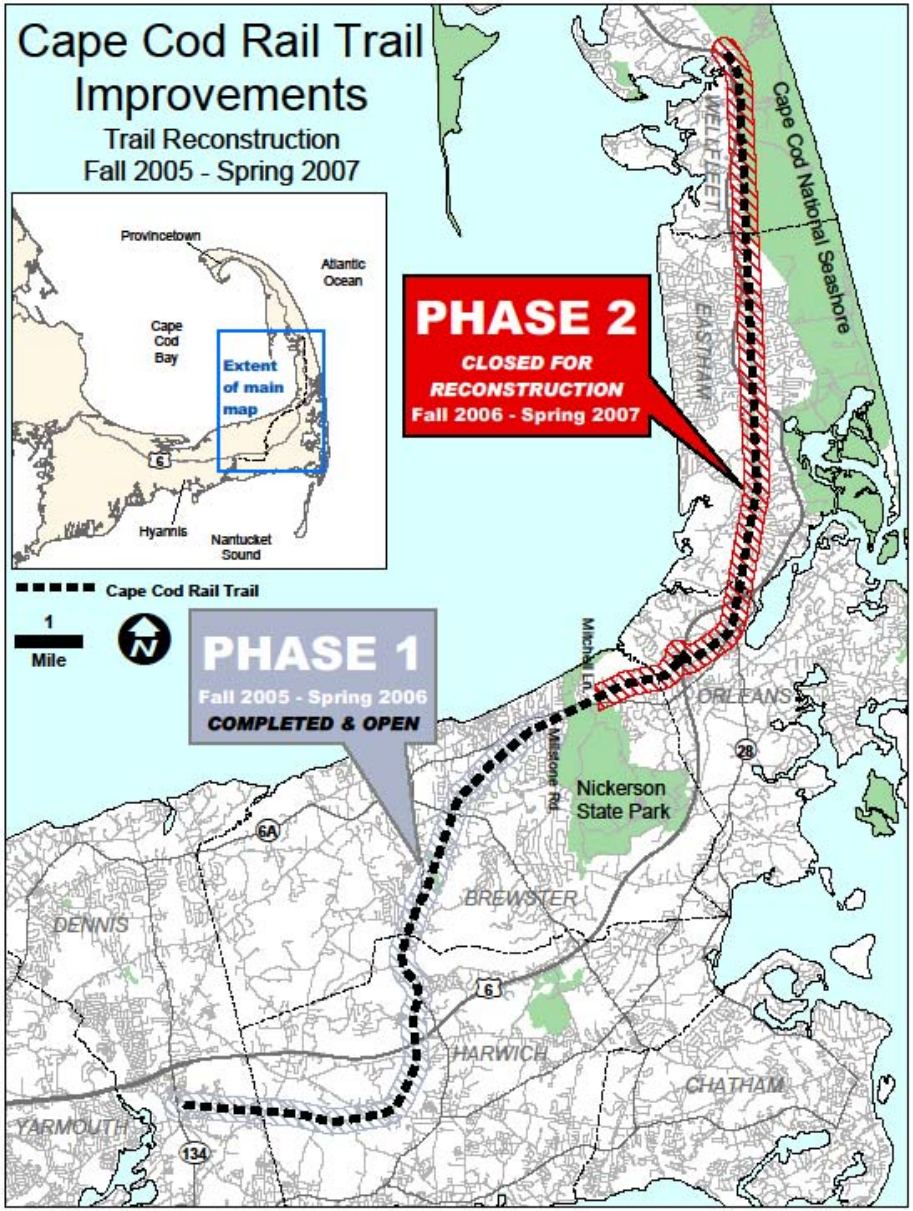
Original Cape Cod Rail Trail

- Original Construction (22 miles)
  - Dennis to Wellfleet (1977)
- Connectivity
  - National Seashore
  - Audubon Sanctuary
  - Nickerson State Park
  - Eight (8) Parking Lots
  - Orleans Center


Atlantic Ocean
PROVINCETOWN
WELLFLEET TRAILHEAD
Cape Cod Bay
CAPE COD CANAL
SAGAMORE BRIDGE
BARNSTABLE
CHATHAM
SOUTH DENNIS TRAILHEAD
Nantucket Sound
Cape Cod Rail Trail
Old Colony Rail Trail
LEGEND
Major Road
Other Road
Cape Cod Rail Trail
Old Colony Rail Trail (Harwich & Chatham Municipal Trail)
Granite Trail-Mile Marker
Parking
Restrooms
Town Boundary
River, Brook
Lake, Pond
0 0.5 1.0 1.5
SCALE IN MILES
N
Wellfleet Harbor
Cape Cod Bay
Atlantic Ocean
Nantucket Sound
Herring River
Chequessett Neck Rd.
WELLFLEET CENTER
Ocean View Rd.
Chequessett Neck Rd.
The Cove
WELLFLEET TRAILHEAD
LECOUNT HOLLOW BEACH
Dunstable Cove
MARCONI STATION
Blackfish Creek
NATIONAL SEASHORE: HEADQUARTERS AND MARCONI AREA
Loagy Bay
MARCONI BEACH
Fresh Brook
GREAT ISLAND
AUDUBON SANCTUARY
WELLFLEET EASTHAM
NAUSET LIGHT BEACH
Cable Rd.
Ocean View Dr.
Brackett Rd.
Nauset Rd.
CAUTION: Sharp turns on rail trail at Rte. 6 Underpass
Minister Pond
COAST GUARD BEACH
Nauset Bay
NAUSET BIKE TRAIL
Locust Rd.
Salt Pond
NATIONAL SEASHORE: SALT POND VISITORS CENTER
Great Pond
Salt Pond Bay
Samoset Rd.
Herring Pond
Depot Pond
NAUSET BEACH
Bridge Rd.
Governor Prence Rd.
Rte. 6
Blue Maudee River
ORLEANS ROTARY
ORLEANS CENTER
Town Cove
Main St.
Beach Rd.
NAUSET BEACH
West Rd.
Meeting House Creek
Crosby Landing Rd.
Eldredge Parkway
EXIT 12
Crystal Lake
Western Pond
Pilgrim Pond
Flax Pond
NICKERSON STATE PARK
Cliff Pond
Little Pleasant Bay
Pleasant Bay
Quanset Creek
Setucket Rd.
Millstone Rd.
Long Pond Rd.
Freemans Way
Sheep Pond
Black's Pond
Seymour Pond
Long Pond
EXIT 11
Hinckleys Pond
EXIT 10
Kettle Pond
Island Pond
Queen Anne Rd.
Great Western Rd.
Sand Pond
Emory Pond
Crowell Rd.
Lower Pond
White Pond
Oyster Pond
CHATHAM CENTER
CHATHAM MUNICIPAL AIRPORT
HARWICH CENTER
BIKE ROTARY
West Reservoir
SOUTH DENNIS TRAILHEAD
EXIT 9
Depot St.
Dr. Taylor Hill Rd.
Grand Cove
Lower County Rd.
Oyster River
Chatham Harbor
Stage Harbor
CHATHAM LIGHTHOUSE
Short Rd.

Cape Cod Rail Trail Rehabilitation Project

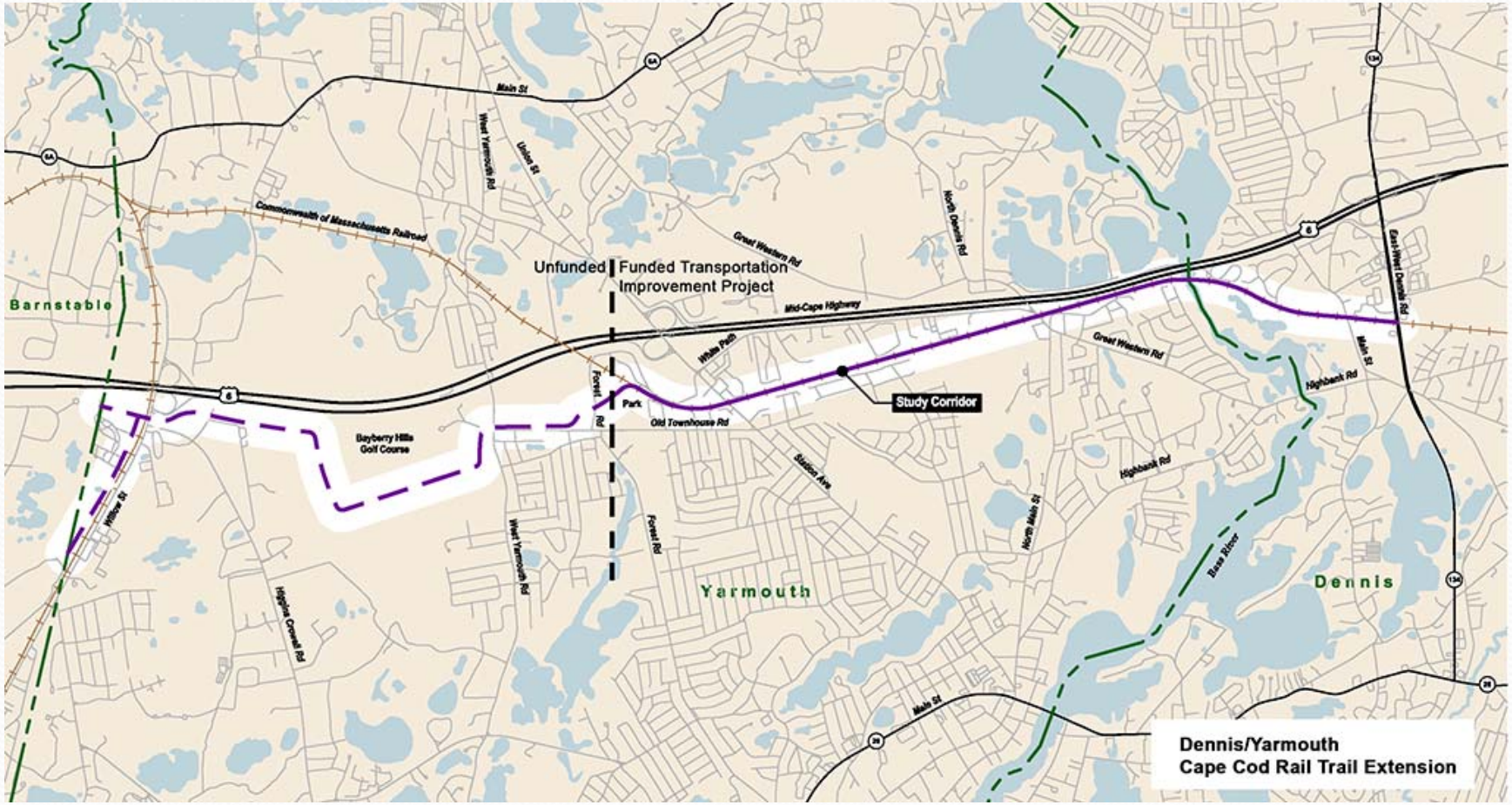
- **Lead Agency:** Department of Conservation and Recreation
- Project Costs: $5.0 Million
- Two Phase Construction Schedule
  - Phase 1 (2005)
    - -Dennis to Nickerson State Park
  - Phase 2 (2007)
    - Nickerson State Park to South Wellfleet


Cape Cod Rail Trail Improvements
Trail Reconstruction
Fall 2005 - Spring 2007
Provincetown
Atlantic Ocean
Cape Cod Bay
Extent of main map
6
Hyannis
Nantucket Sound
Cape Cod Rail Trail
1 Mile
N
PHASE 2
CLOSED FOR RECONSTRUCTION
Fall 2006 - Spring 2007
PHASE 1
Fall 2005 - Spring 2006
COMPLETED & OPEN
WELLFLEET
EASTHAM
Cape Cod National Seashore
Mitchell Ln.
Millstone Rd
ORLEANS
28
Nickerson State Park
6A
BREWSTER
DENNIS
6
HARWICH
CHATHAM
YARMOUTH
134

Cape Cod Rail Trail Extension Dennis to Yarmouth

- **Limits**
  - Dennis (Route 134) to Yarmouth (Station Ave.)
- **Project Costs**
  - $8.0 Million
  - State Transportation Improvement Program
- **Project Schedule**
  - Design Completion: Summer 2014
  - Construction: Fall 2014 to Fall 2016

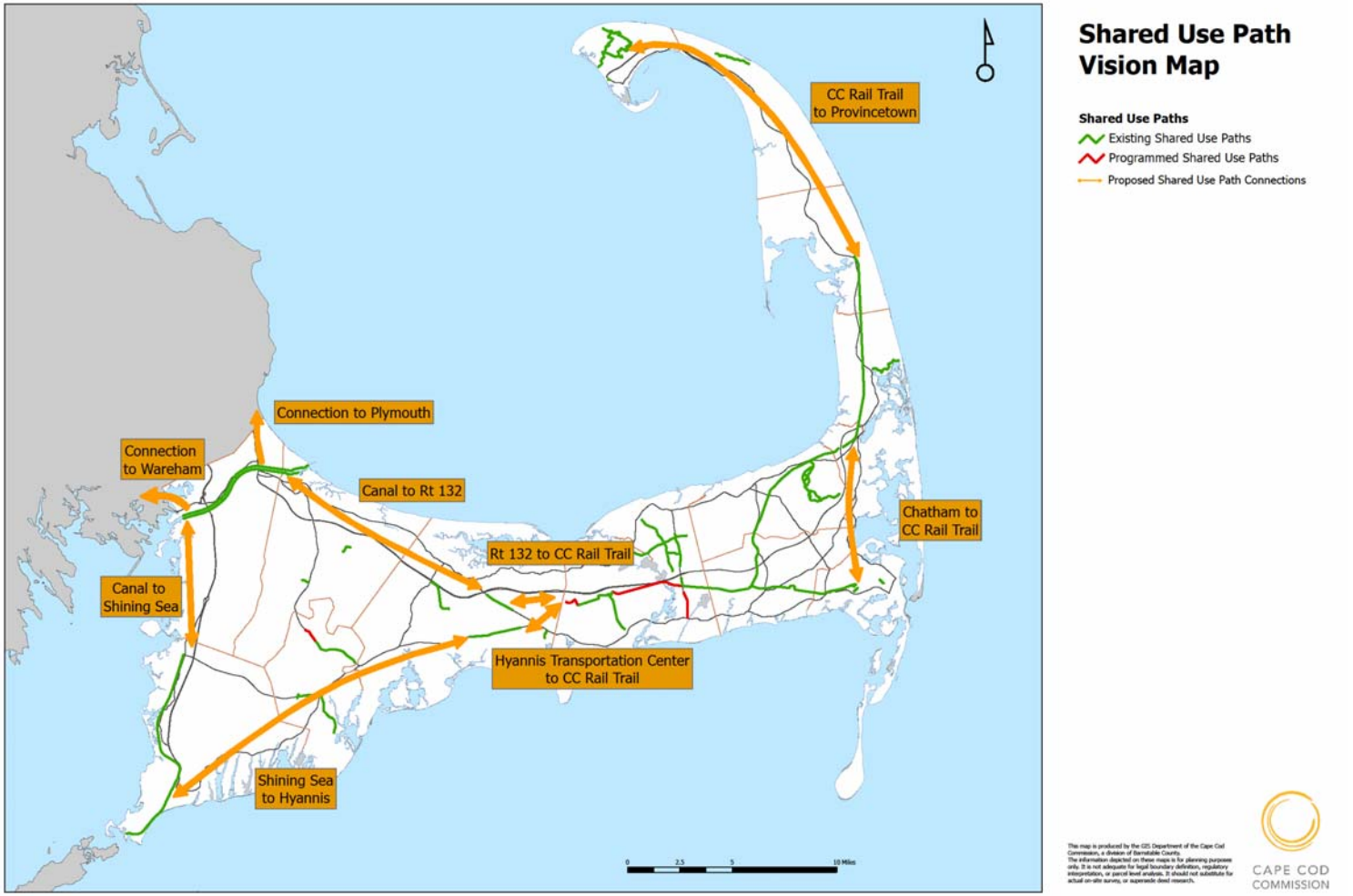
Yarmouth/Dennis CCRT Extension 25% Design Development



Cape Cod National Seashore Bicycle Feasibility Study

- Planning Team
  - National Park Service
  - Cape Cod Commission
  - 15 Cape Cod Communities
  - Planning/Design Consultant (VHB)
- Study Goals
  - Identify Potential Bike System Improvements
  - Identify Top 40 Projects for further development

Cape Cod Region
Shared Use Path Vision Map



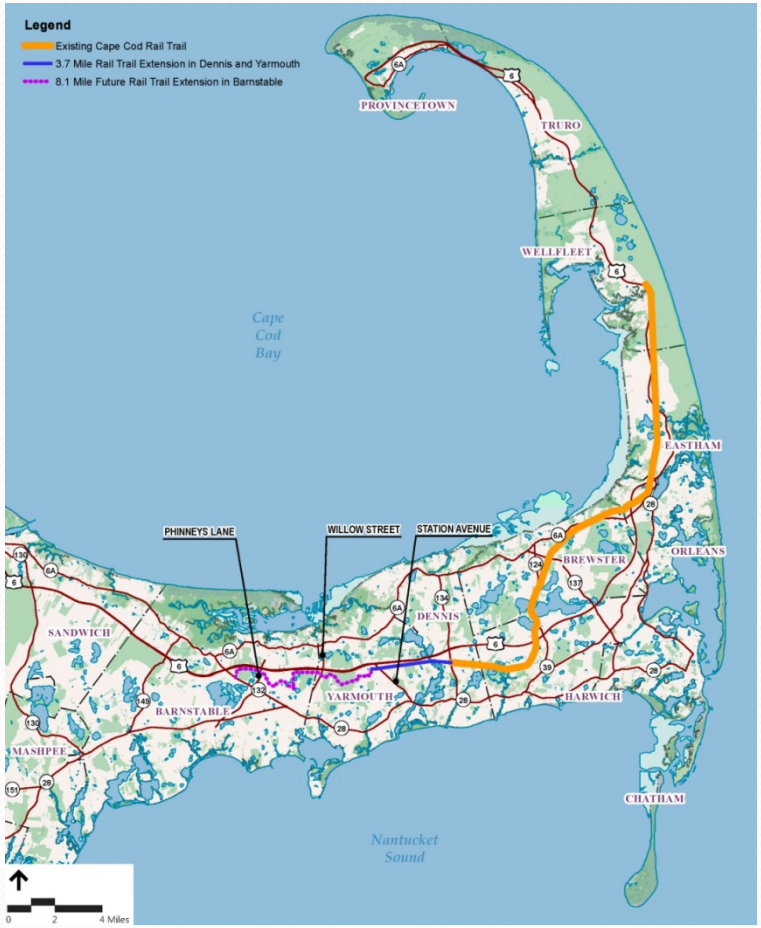
Commonwealth of Massachusetts General Laws

- **Mass General Laws:** Chapter 90E; Section 2a
  - "accommodation of bicycle and pedestrian traffic in the planning, design, and construction, reconstruction or maintenance of any project undertaken by the (MassDOT)."
- **MassDOT Standards**
  - Addition of 4' Shoulders for Bike Accommodations
  - Addition of 5' Shoulders for Bike Lanes

Cape Cod Rail Trail East/West Extension

Station Avenue, Yarmouth to Iyannough Road (Route 132), Barnstable

Dennis/Yarmouth/Barnstable CCRT Extension



Barnstable/Yarmouth
CCRT Extension: Alternative 1

Barnstable/Yarmouth
CCRT Extension: Alternative 2

Barnstable/Yarmouth
CCRT Extension: Alternative 3

Barnstable/Yarmouth CCRT Extension: Alternative 4

Barnstable/Yarmouth CCRT Extension: Alternative 5

Barnstable/Yarmouth
CCRT Extension: Alternative 6

Project Need Form (PNF)

Cape Cod Rail Trail Extension

Station Avenue in Yarmouth to Route 132 in Barnstable

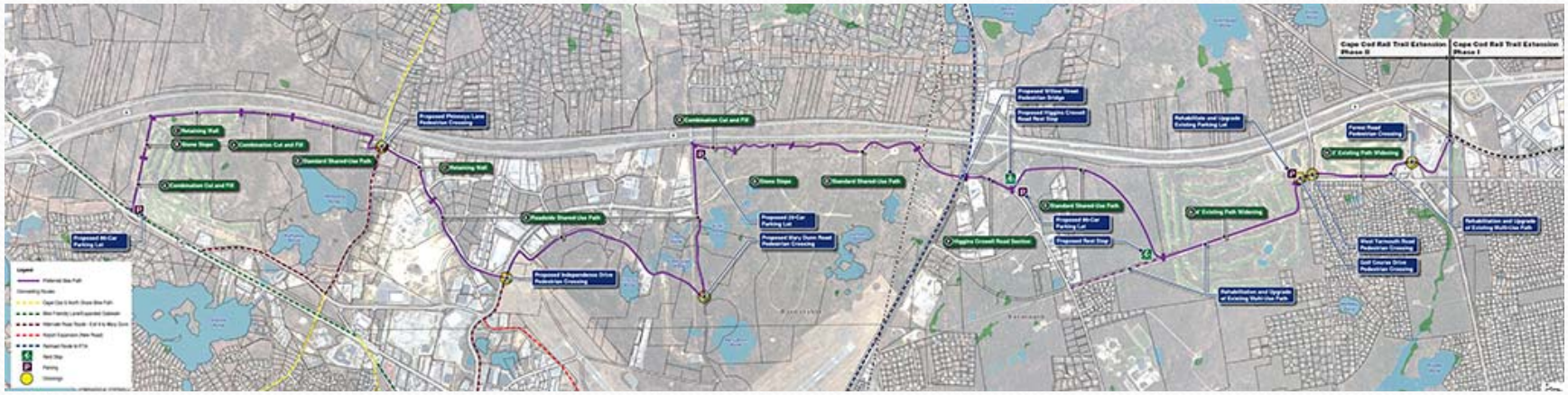
Yarmouth/ Barnstable, Massachusetts

Prepared for **Towns of Barnstable and Yarmouth**

Prepared by **Vanasse Hangen Brustlin, Inc.**
Watertown, Massachusetts

Fall, 2012

Cape Cod Rail Trail Extension Preferred Alternative

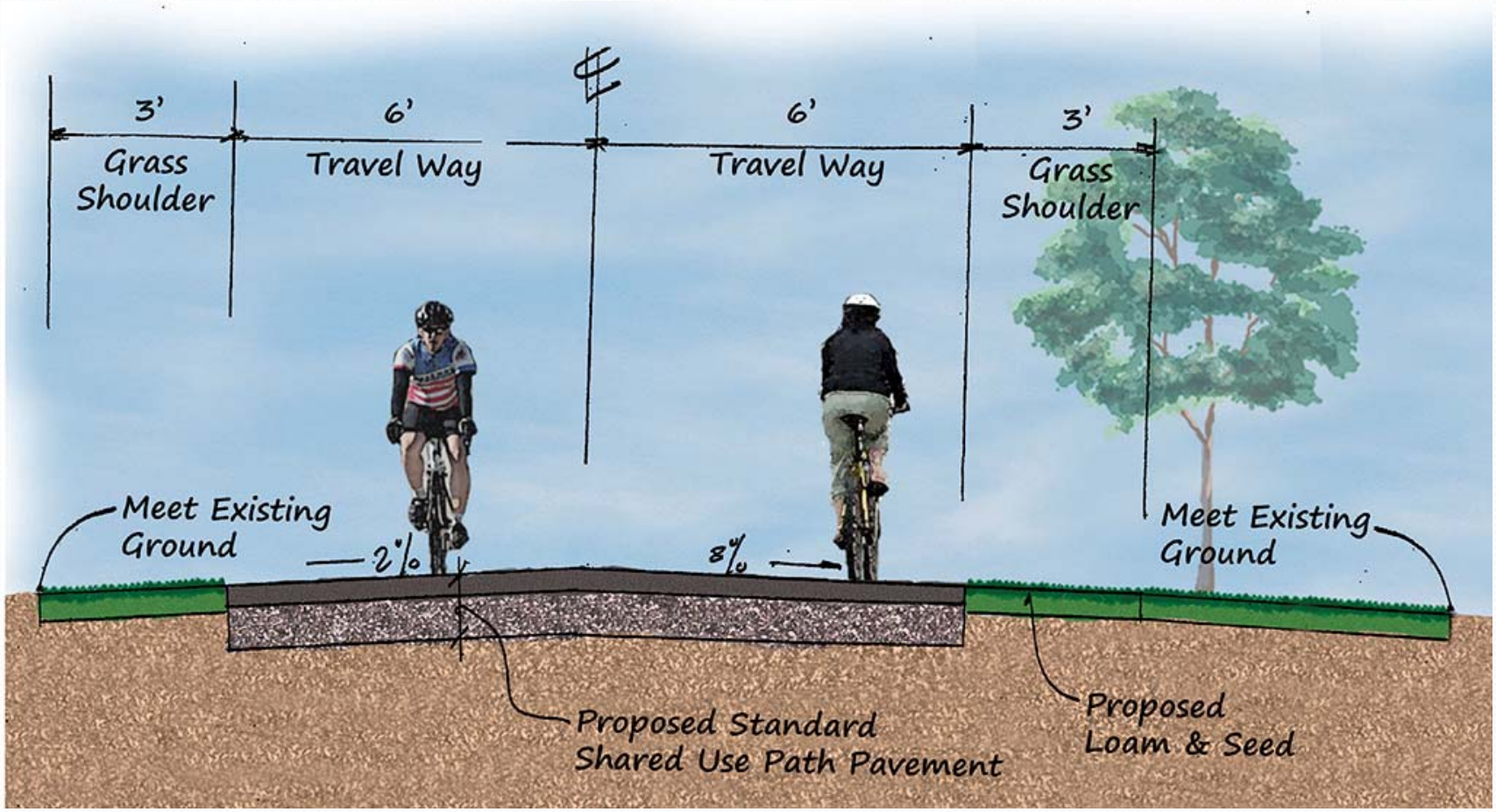


Bridge Crossing

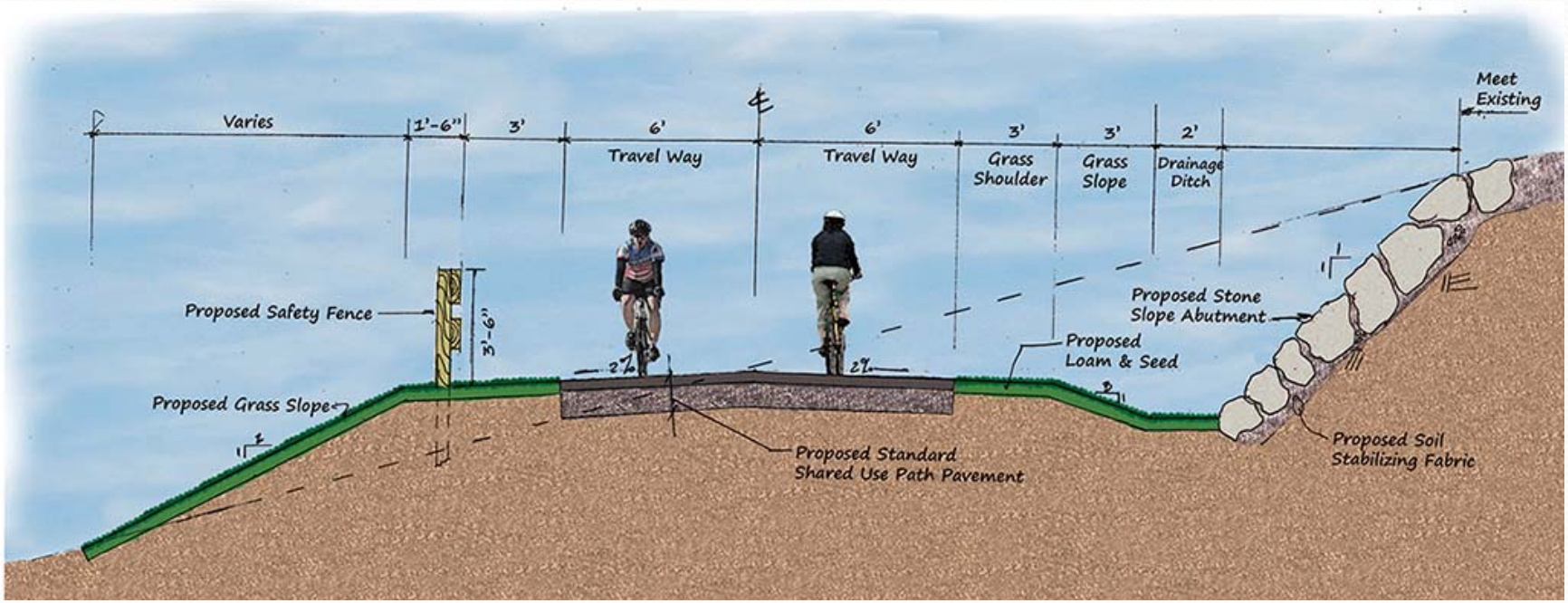
Proposed view looking South
along Route 134 in Dennis, Massachusetts

Existing

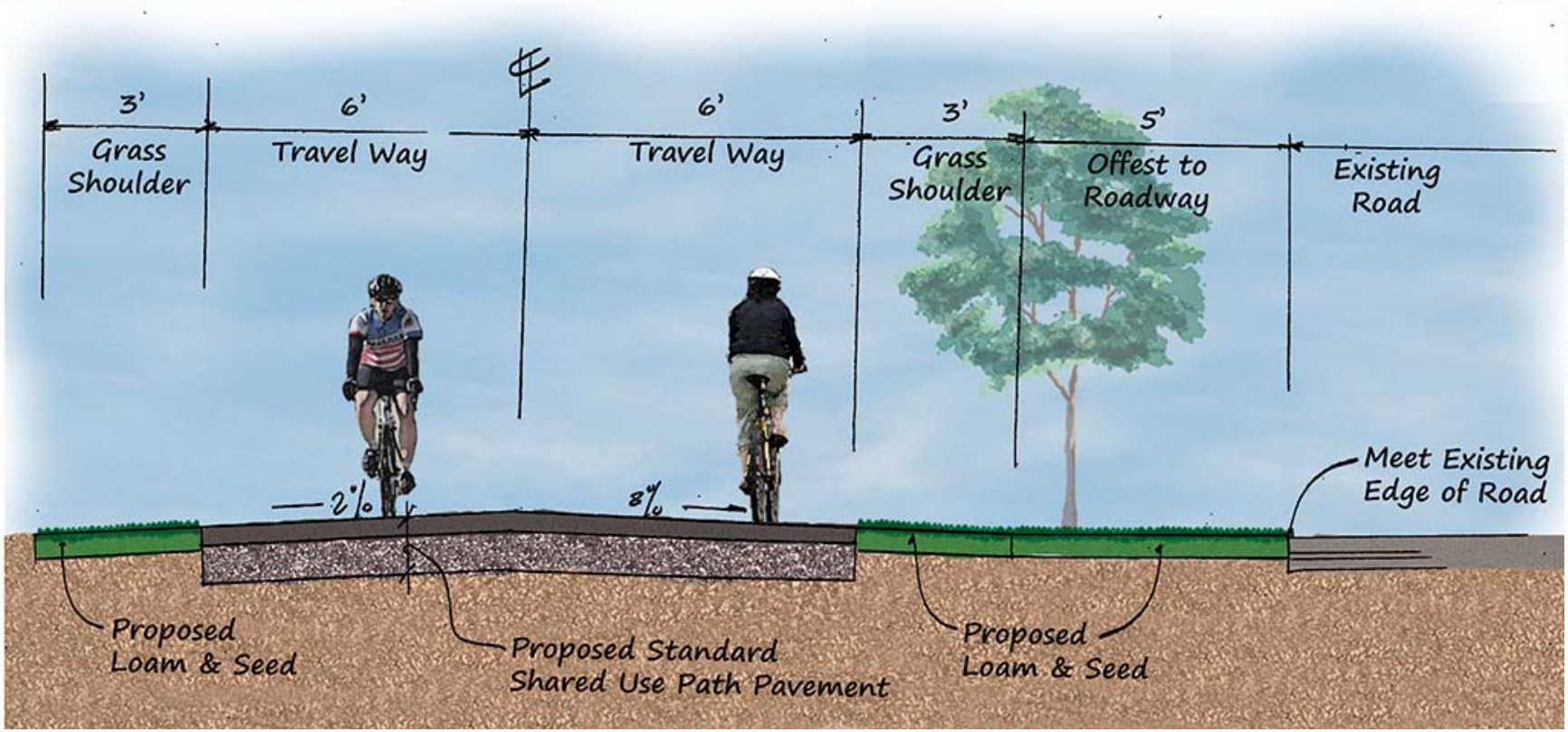
Typical Section



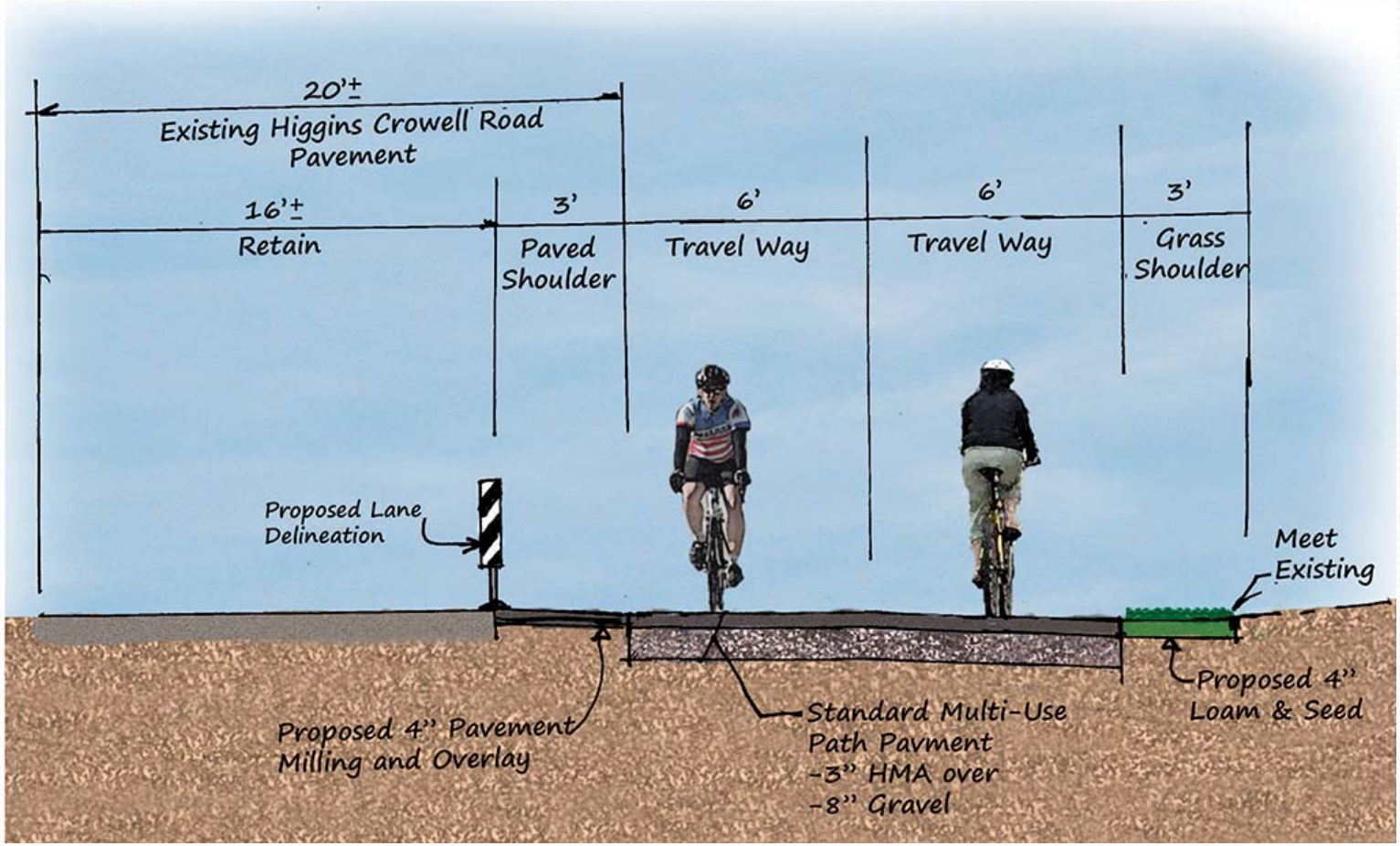
Typical Section



Typical Section



Typical Section



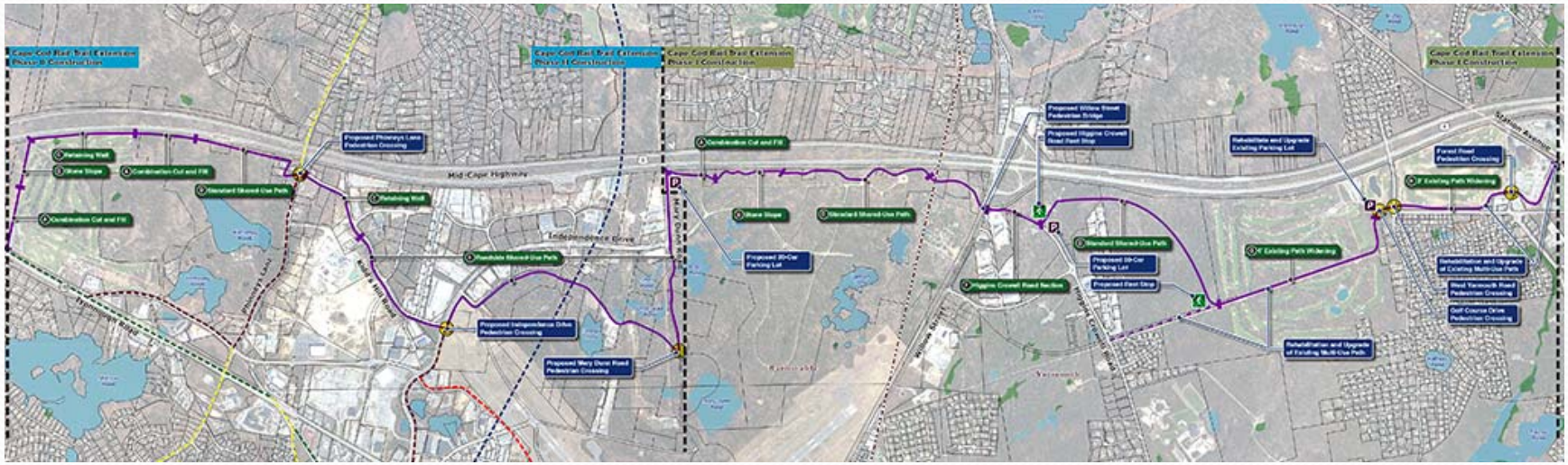
Cape Cod Rail Trail Extension
Preferred Alternative Construction Costs

- Single Phase Project: **$11,070,000**

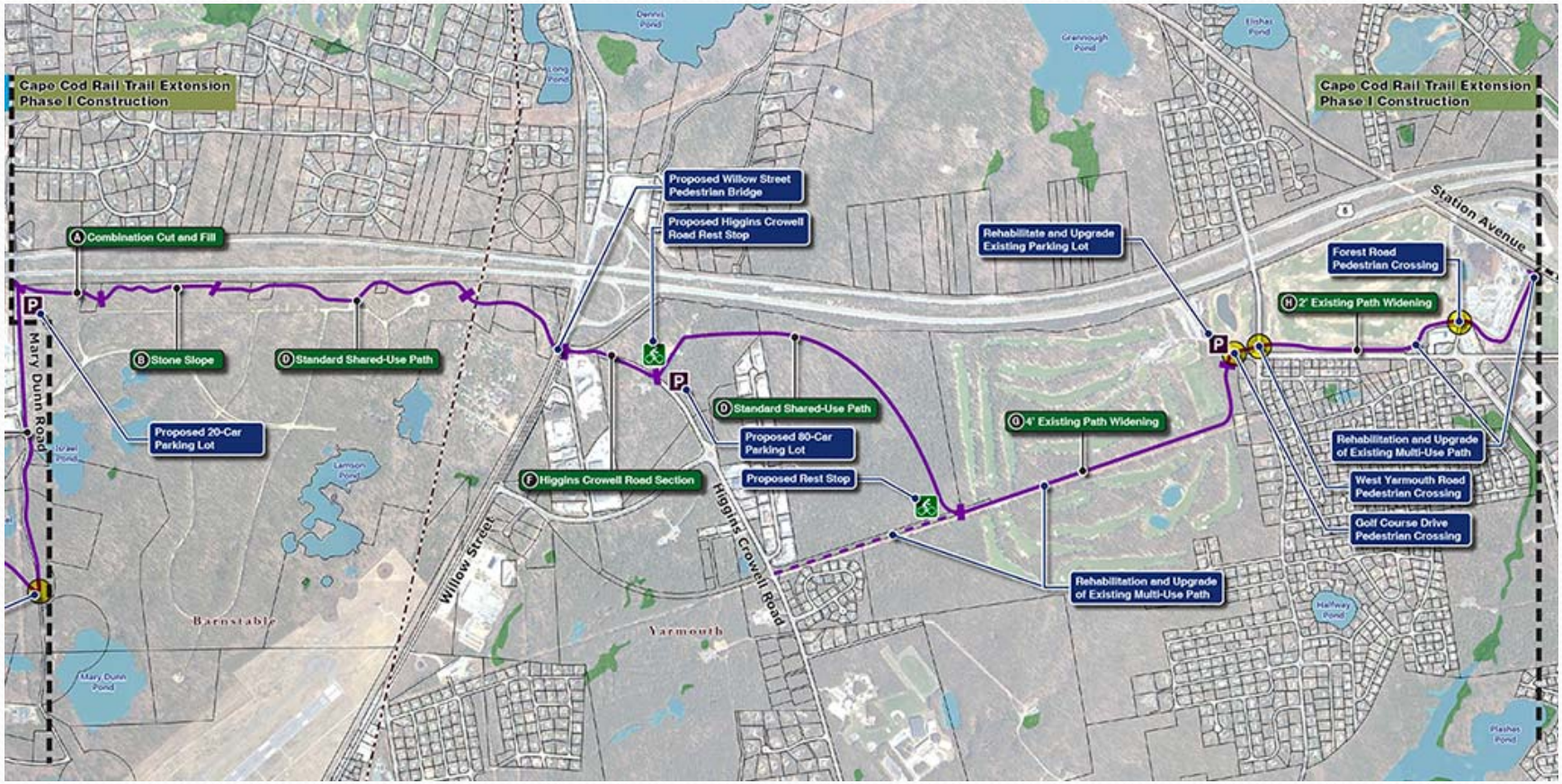
Cape Cod Rail Trail Extension Two Phase Project

- Two Phase Project
  - Phase 1: Station Avenue to Mary Dunn Road
  - Phase 2: Mary Dunn Road to Route 132

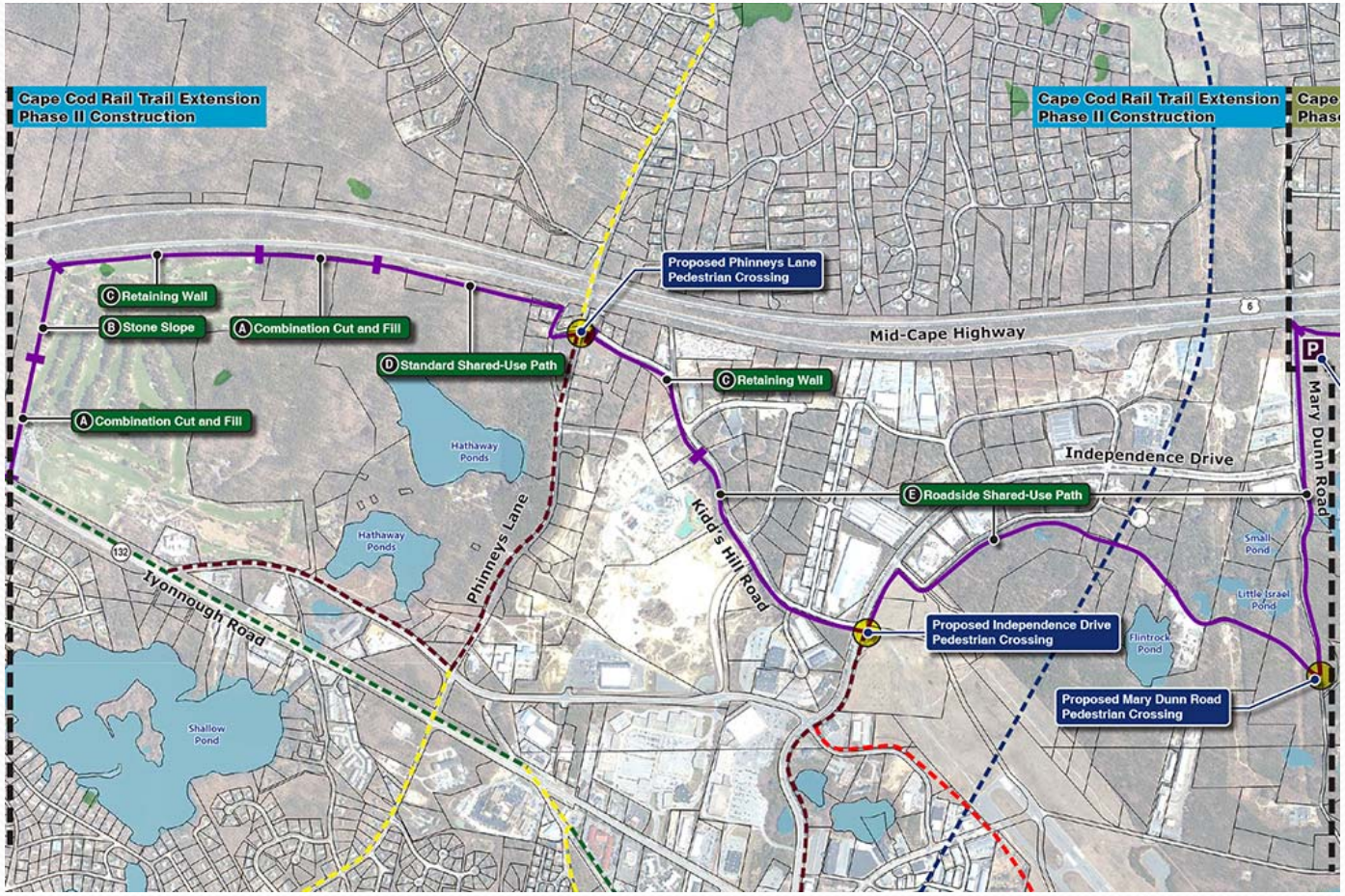
Cape Cod Rail Trail Extension Two Phase Project



Phase 1: Station Avenue (Y) to Mary Dunn Road (B)



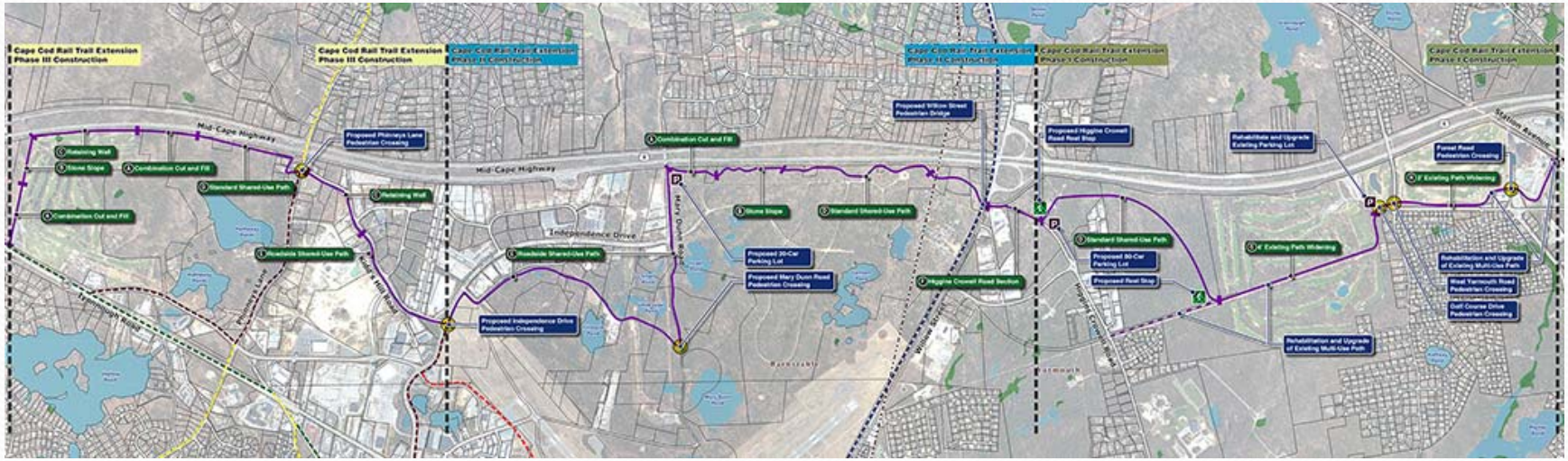
Phase 2: Mary Dunn Road to Route 132



Cape Cod Rail Trail Extension
Two Phase Project: Project Costs

- Two Phase Project:
  - Phase 1: Station Avenue to Mary Dunn Road: **$6,440.000**
  - Phase 2: Mary Dunn Rd. to Route 132: **$4,630,000**

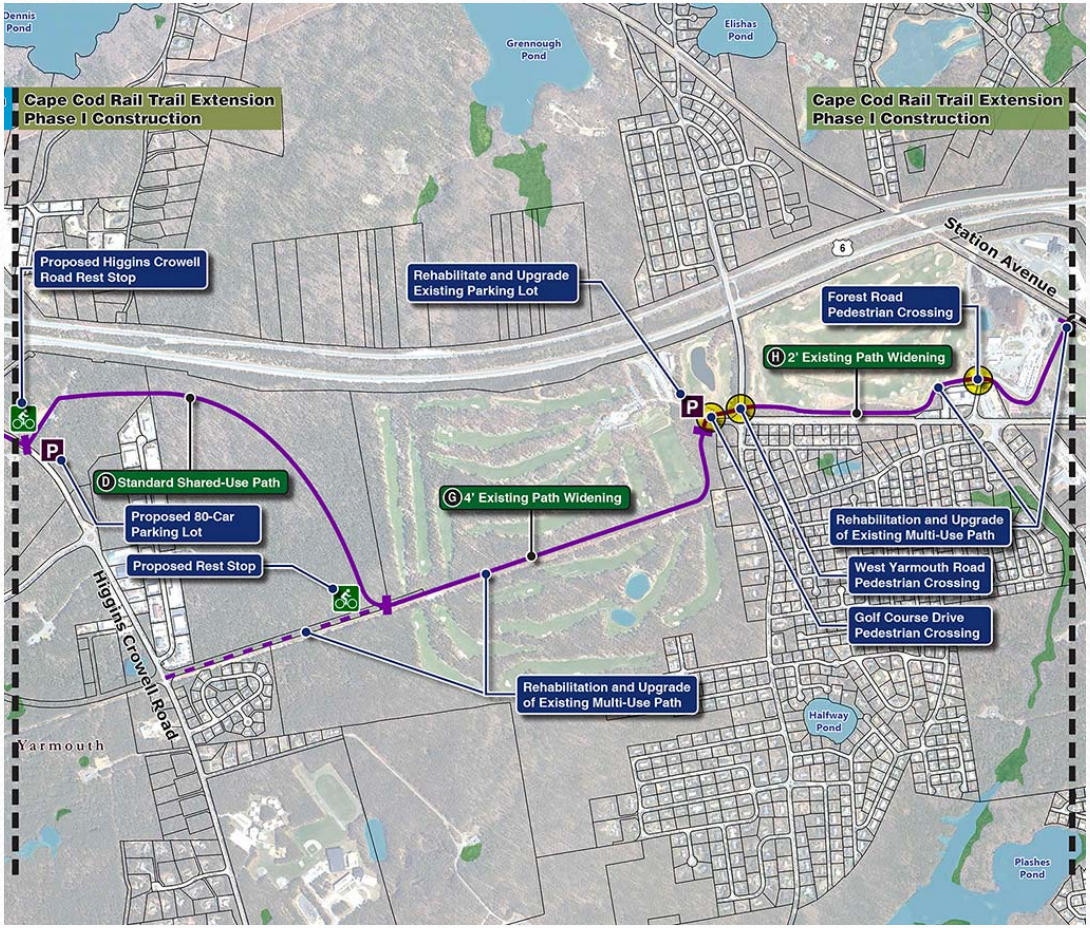
Cape Cod Rail Trail Extension Three Phase Project


Cape Cod Rail Trail Extension
Phase III Construction
Mid-Cape Highway
Independence Drive
Proposed Pilgrim Lane Pedestrian Crossing
Proposed Independence Drive Pedestrian Crossing
Proposed Mary Dunn Road Pedestrian Crossing
Proposed 30-Car Parking Lot
Proposed Rest Stop
Proposed Higgins Crowell Road Rest Stop
Rehabilitate and Upgrade Existing Parking Lot
Forest Road Pedestrian Crossing
West Yarmouth Road Pedestrian Crossing
Golf Course Drive Pedestrian Crossing
Rehabilitation and Upgrade of Existing Multi-Use Path
Combination Cut and Fill
Stone Slope
Standard Shared-Use Path
Roadside Shared-Use Path
Retaining Wall
Station Avenue

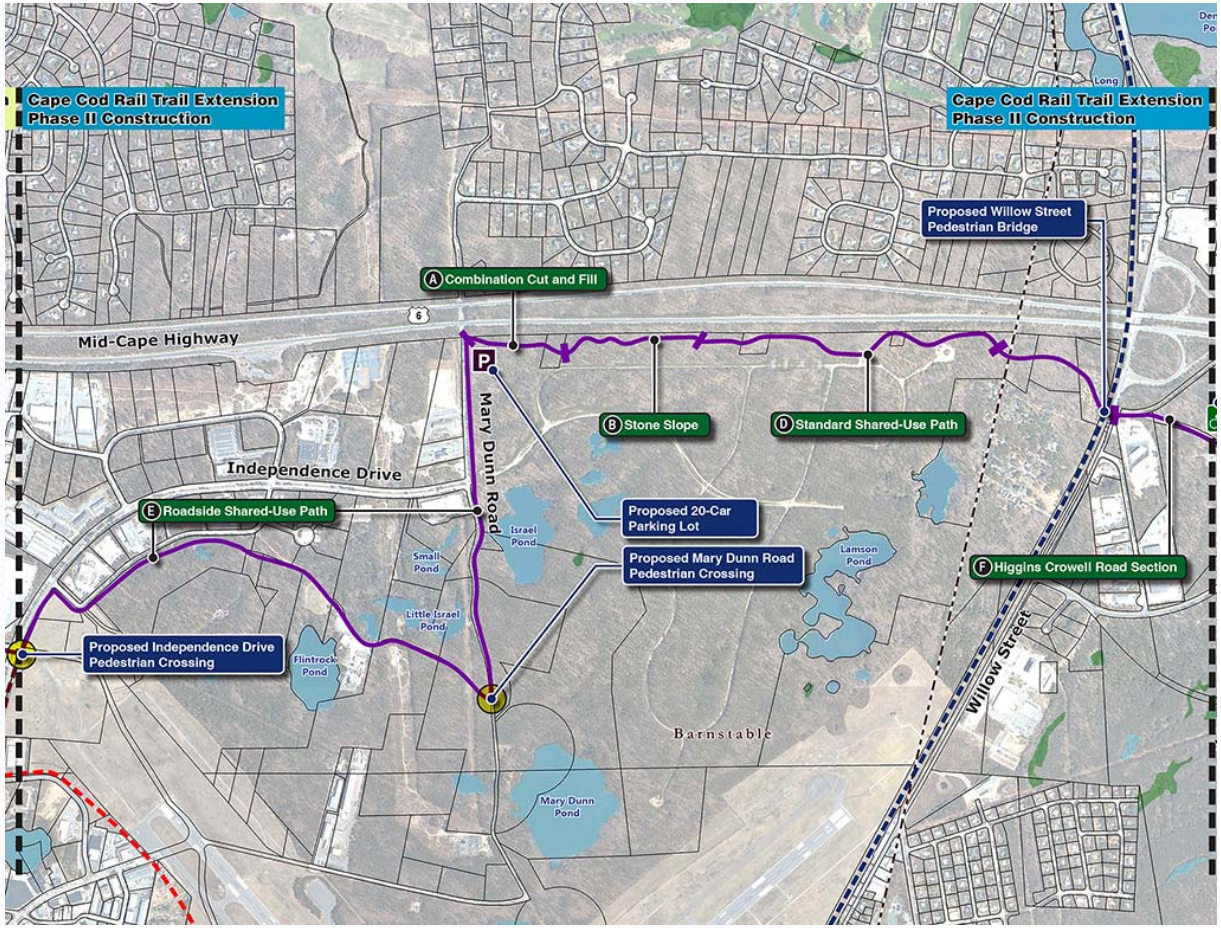
Cape Cod Rail Trail Extension Three Phase Project

- Three Phase Project
  - Phase 1: Station Avenue to Higgins Crowell Road
  - Phase 2: Higgins Crowell Road to Independence Drive
  - Phase 3: Independence Drive to Route 132

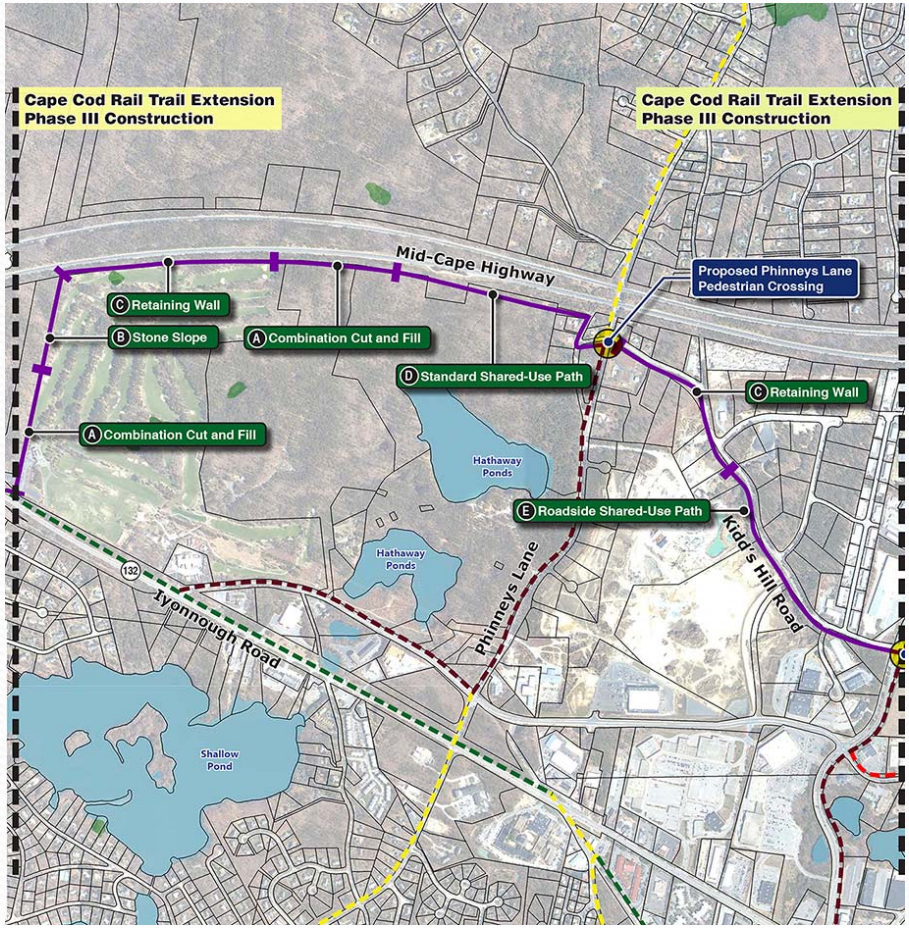
Phase 1: Station Ave to Higgins Crowell Road



Phase 2: Higgins Crowell Road to Independence Drive



Phase 3: Independence Drive to Route 132



Cape Cod Rail Trail Extension
Three Phase Project: Project Costs

- <u>Three Phase Project:</u>
  - Phase 1: Station Ave. to Higgins Crowell Rd.: **$2,520,000**
  - Phase 2: Higgins Crowell Rd to Kidd's Hill Rd: **$5,410,000**
  - Phase 3: Kidd's Hill Road to Route 132: **$3,140,000**

Future Project Development

- **Step 1:** MassDOT and the Cape Cod Commission select preferred project phasing scenario.
- **Step 2:** Prepare and submit Project Initiation Form.
- **Step 3:** MassDOT Project Review Committee programs the preferred alternative
- **Step 4:** JTC and MPO Approval of Program Funds
- **Step 5**: Commence Project Design Development

Potential Project Schedule

Activity	Date
PIF Submission	Spring, 2013
MassDOT PRC Approval	Summer, 2013
CCMPO Funding Approval	Fall, 2013
Survey/Design/Permits	2014 to 2017
Construction	2017 to 2019